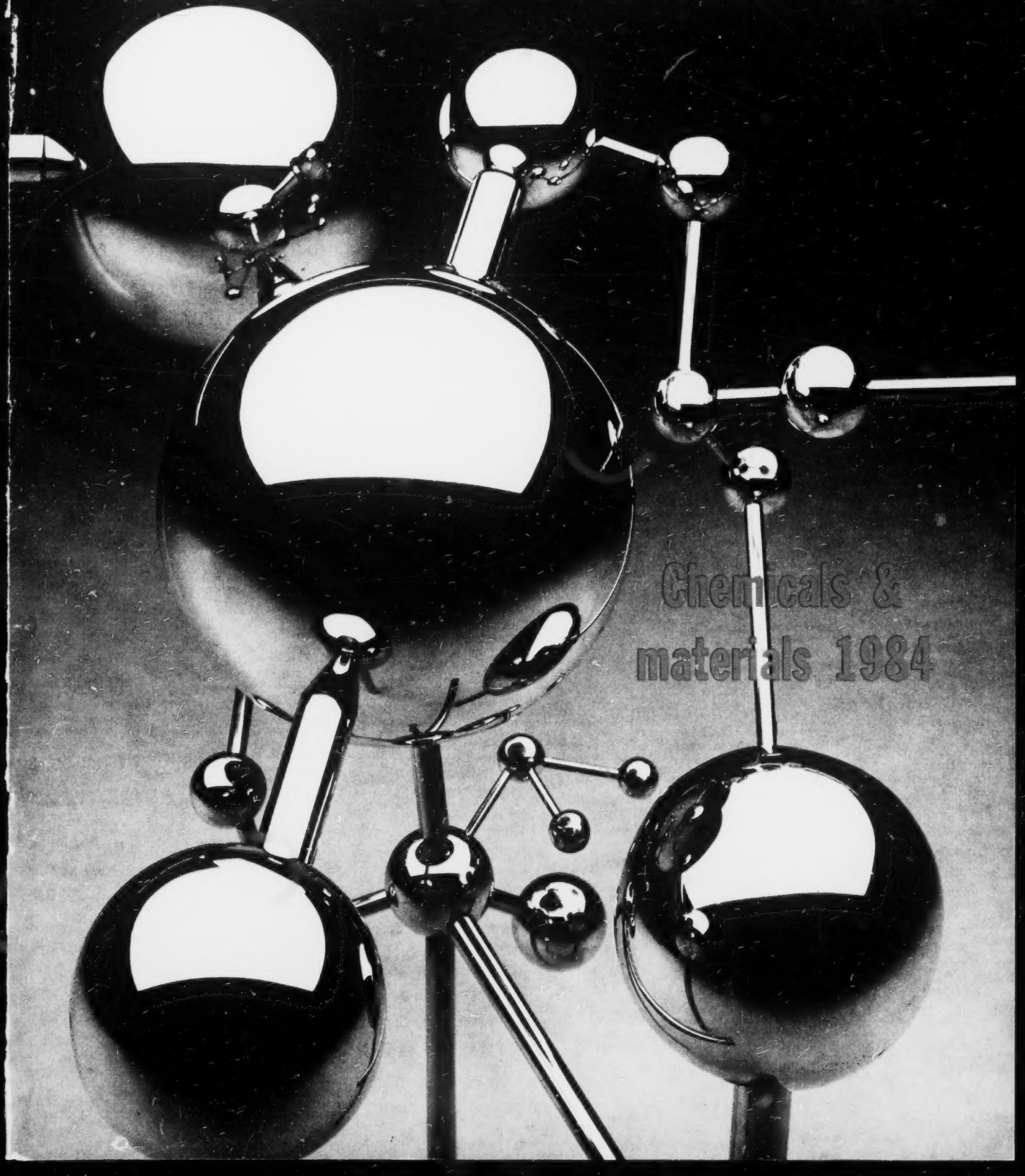
# Rubber World

The technical service magazine for the rubber industry

Volume 191, No. 1

October 1984



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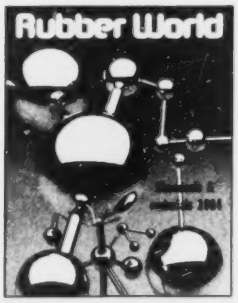


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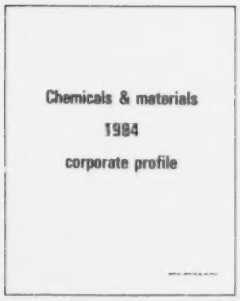


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**Cover photo courtesy of Allied Chemical**

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# Business Briefs

Louis, MO, a distributor of less than truckload quantities of its zinc oxide.

**Sylacauga Calcium Products** appointed **Seegott, Inc.**, Parsippany, NJ as a distributor for calcium products and **G-3 Industries**, Grand Junction, CO as distributors for calcium carbonate products.

**Union Process** named **Firing Industries**, Niagara-on-the-Lake, Ontario as a distributor and sales representative for processing equipment for fine particle grinding and dispersion.

**Littleford Bros.** named **Southern Engineering Sales**, Tallahasee, FL, **Process Equipment Sales**, Cherry Hill, NJ and **Lawson Technologists**, Cranford, NJ as manufacturing rep organizations representing Littleford's "Aer-O-Tek" material handling equipment.

**Wilmington Chemical Corp.** appointed the **J.D. Mullen Co.**, Denver, CO, as exclusive sales agent for its polyurethane dispersions.

**Lubrizol Corp.** established a partnership with **Intera Corp.**, Cleveland, TN to market the technology and chemicals developed by Intera which provide synthetic fibers with the permanent absorbency and comfort of natural fibers.

## Financial statements

**Blasius Industries** reported 1984 net sales amounted to $42.7 million with net earnings of $1.78 million.

**Brad Ragan, Inc.** had first quarter revenues of $51 million and net income of $716,000.

**Cabot Corp.** reported net income for the third quarter was $26.49 million on sales of $468.2 million.

**Carlisle Corp.'s** second quarter net earnings were $8 million on sales of $131.2 million.

**Compo** reported third quarter revenues were $40.4 million and net income was $726,000.

**Dayco Corp.** had third quarter sales of $226.4 million and earnings of $3.3 million.

**Exxon** reported that worldwide chemicals earnings were $256 million in the first six months of 1984 and sales volumes were up 18%.

**Firestone** reported income for the quarter of $29 million on sales of $1 billion.

**Jones & Vining** reported second quarter net earnings of $688,000 on sales of $9.69 million.

**Myers Industries** had second quarter sales of $22.6 million and net income of $843,000.

**Petrolane Inc.** reported a loss for the quarter of $5.9 million. Sales were $210 million.

**Rubbermaid's** second quarter earnings were $9 million on sales of $119 million.

## Price changes

**Uniroyal** increased the price for antiozonants, accelerators, antioxidants, chemical bonding agents and curatives an average 10-15¢.

**SCM Specialty Chemicals** announced a 10% price increase on Prosil organofunctional silanes.

**Hercules** made these price changes: increased the base prices for most types of its "Parlon" chlorinated rubber by 8¢/lb.; increased the price of its mixed-acid emulsifier Resin 3072 2¢/lb.; raised the price of Hercolube 202 by 5¢/lb.; Hercoflex 600 increases 5¢/lb.; Hercoflex 707 increases 10¢/lb.; Hercoflex 707A rises 5¢/lb.; Hercoflex 707/707A goes up 7.5¢/lb.; soluble grades of nitocellulose increase 8¢/lb.

**SWS Silicones** increased the price of selected specialty, functional fluid and emulsion silicone products approximately 5%.

**Degussa AG** increased the price of pentaerythritol to at least GM 3.30 per kg.

**Akzo Chemie America-Noury Chemical's** new per pound prices for selected organic peroxides are: Perkadox 16/35- $4.24; 16-W40- $4.47; 16-W70- $7.44; Cadox TS-50- $14.31; Cadox BS- $7.42.

**RMA industry rubber report through June 1984**
**(figures are expressed in metric tons)**

| | Cumulative 1984 | Cumulative 1983 | % Change 84 vs 83 |
|---|---|---|---|
| **Total New Rubber** | | | |
| New rubber available | 1,640,496 | 1,406,739 | 16.62 |
| Imports | 525,618 | 431,337 | 21.86 |
| Exports | 186,888 | 159,489 | 17.18 |
| Apparent Consumption | 1,427,454 | 1,232,296 | 15.84 |
| **Total Natural Rubber** | | | |
| Imports | 408,436 | 355,093 | 15.02 |
| Exports | 12,570 | 9,064 | 38.68 |
| Apparent Consumption | 389,304 | 343,523 | 13.33 |
| % Total new rubber | 27.27 | 27.87 | |
| **Total Synthetic Rubber** | | | |
| Production | 1,114,878 | 975,402 | 14.30 |
| Imports | 117,182 | 76,244 | 53.69 |
| Exports | 174,318 | 150,425 | 15.88 |
| Apparent Consumption | 1,038,150 | 888,773 | 16.81 |
| % Total new rubber | 72.72 | 72.12 | |
| **Total SBR** | | | |
| Production | 500,430 | 449,735 | 11.27 |
| Imports | 35,298 | 26,577 | 32.81 |
| Exports | 54,613 | 42,051 | 29.87 |
| Apparent Consumption | 459,177 | 433,712 | 5.87 |
| **Total Nitrile** | | | |
| Production | 33,265 | 25,989 | 28.00 |
| Imports | 5,739 | 4,025 | 42.58 |
| Exports | 3,812 | 3,045 | 25.19 |
| Apparent Consumption | 34,952 | 27,051 | 29.21 |
| **Polybutadiene** | | | |
| Production | 184,029 | 160,518 | 14.65 |
| Imports | 33,850 | 17,998 | 88.08 |
| Exports | 11,940 | 7,934 | 50.49 |
| Apparent Consumption | 207,779 | 166,435 | 24.84 |
| **Ethylene-Propylene** | | | |
| Production | 114,719 | 81,615 | 40.56 |
| Imports | 370 | 208 | 77.88 |
| Exports | 17,893 | 16,129 | 10.94 |
| Apparent Consumption | 92,601 | 66,394 | 39.47 |
| **Butyl, Polyisoprene, Silicone and other Synthetic Elastomers** | | | |
| Production | 218,989 | 193,084 | 13.42 |
| Imports | 39,908 | 25,940 | 53.85 |
| Exports | 66,330 | 55,829 | 18.81 |
| Apparent Consumption | 197,112 | 153,561 | 28.36 |
| **Polychloroprene** | | | |
| Production | 63,446 | 64,462 | −1.58 |
| Imports | 2,017 | 1,496 | 34.83 |
| Exports | 19,730 | 25,437 | −22.44 |
| Consumption | 46,528 | 41,621 | 11.79 |

## Markets, news

Lydall, Inc. said its consumer product business of the company's Huntington, IN operation of its elastomer products group is for sale. The company said the Daisy line of consumer household products does not fit with the group's long range strategic plan to be in engineered, custom formulated, precision elastomer products. Lydall is carrying on negotiations to sell the consumer portion of the operation with a local investment group headed by members of Huntington management as well as other parties.

The Biltrite Corp., the leading supplier of shoe soling material to the domestic footwear industry plans to phase out the operations of its Chelsea, MA factory and to consolidate the production of the product lines currently manufactured there into its Ripley, MS plant. In connection with the phaseout, approximately 200 jobs will be eliminated in Chelsea. It is expected that the absorption of the Chelsea production into Ripley will be completed some time in 1985. The move is a direct result of the rapidly decreasing demand for the company's footwear component products caused by the surging increase in imported shoes.

"The August import figures demonstrate that the Senate Finance Committee's request to the International Trade Commission to begin a new investigation into the devastation of the domestic footwear industry by imports didn't come a moment too soon," George Langstaff, president, Footwear Industries of America said. Langstaff said nonrubber footwear imports soared 33.4% in August over 1983 levels accounting for 69 million pairs of shoes. Langstaff also said that imports are up over 35% in 1984 and that more than 50 shoe factories have shut down and domestic production has declined 7.1% this year.

**RMA monthly tire report through July 1984 (figures in 000)**

| Passenger Tires | 1984 | 1983 | % Change |
|---|---|---|---|
| Shipments | | | |
| Original Equipment | 26,972 | 20,571 | 31.12 |
| Radial | 22,543 | 17,151 | 31.44 |
| Replacement | 71,087 | 65,935 | 7.81 |
| Radial | 54,042 | 45,131 | 19.74 |
| Export | 3,100 | 1,880 | 64.89 |
| Radial | 2,286 | 1,248 | 83.17 |
| Total | 101,159 | 88,386 | 14.45 |
| Radial | 78,871 | 63,530 | 24.15 |
| Production | 88,301 | 78,975 | 11.81 |
| Radial | 65,580 | 54,678 | 19.94 |
| **Truck & Bus Tires** | | | |
| Shipments | | | |
| Original Equipment | 3,995 | 2,516 | 58.78 |
| Radial | 2,046 | 1,152 | 77.60 |
| Replacement | 15,137 | 13,483 | 12.27 |
| Radial | 5,197 | 4,349 | 19.50 |
| Export | 674 | 513 | 31.38 |
| Radial | 322 | 242 | 33.06 |
| Total | 19,806 | 16,512 | 19.95 |
| Radial | 7,565 | 5,743 | 31.73 |
| Production | 18,654 | 15,225 | 22.52 |
| Radial | 7,262 | 4,587 | 58.32 |

Representatives of Uniroyal and the United Rubber Workers agreed to a new comprehensive health care program designed to contain rising costs with imposing additional costs on the employees. Pending outcome of the ratification voting, the company and union will not comment publicly.


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# Brighter days for chemicals, materials

*by Don R. Smith, managing editor*

The rebound in the rubber industry in the United States appears to be stronger now than earlier predictions as most markets are showing better results than were anticipated. The sharp turnaround by the auto industry has forced the debottlenecking of some capacity for chemicals and materials reversing a trend toward mothballing. In 1983 the rubber processing chemical industry operated at a 85% capacity, the highest in 10 years. They operated at 75% in both 1981 and 1982.

The increases in most areas has not come without problems for the domestic suppliers since this has invited many foreign companies to export to the U.S. The increased economic activity, a lag in the economic recovery in other parts of the world and the strength of the U.S. dollar has made the U.S. an attractive market for international firms. The U.S. International Trade Commission reports that elastomer imports during the first quarter of 1984 were up 44% in total pounds over the same period of 1983. A record poundage of imports of elastomers was recorded in 1983 at 1,967 billion pounds, an 8.4% increase over 1982.

The record setting performances by the automakers coupled by rubber inroads into other markets shows up in the increased consumption figures for both automotive and non-automotive elastomers. Consumption of rubber processing chemicals can be tied directly to increases in rubber production. It was thought that even with the reduction of weight of rubber per tire that chemicals might increase usage to enhance aging properties and offer protection to longer lasting tires. But the tire industry reversed itself while rubber chemical consumption continued to drop.

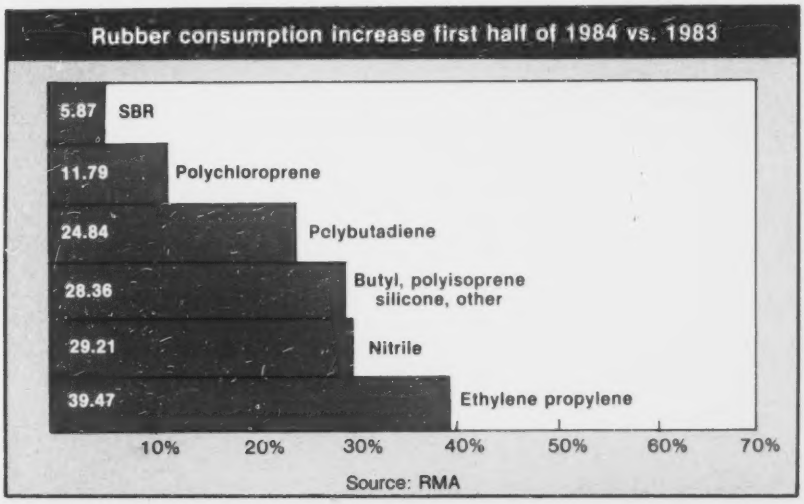
As can be seen in the chart on processing chemical production, poundage produced has declined yearly from 1979 when production was at 394 million pounds to 1982's mark of 232 million pounds which was the lowest total since 1964. The turnaround in production began in the last half of 1983 which is not shown because government figures are not available yet but industry observers seem to think the line will take a 4-6% move upward. A 10%-11% increase is expected for this year but could be higher considering the consumption of rubber is up almost 16% in 1984.

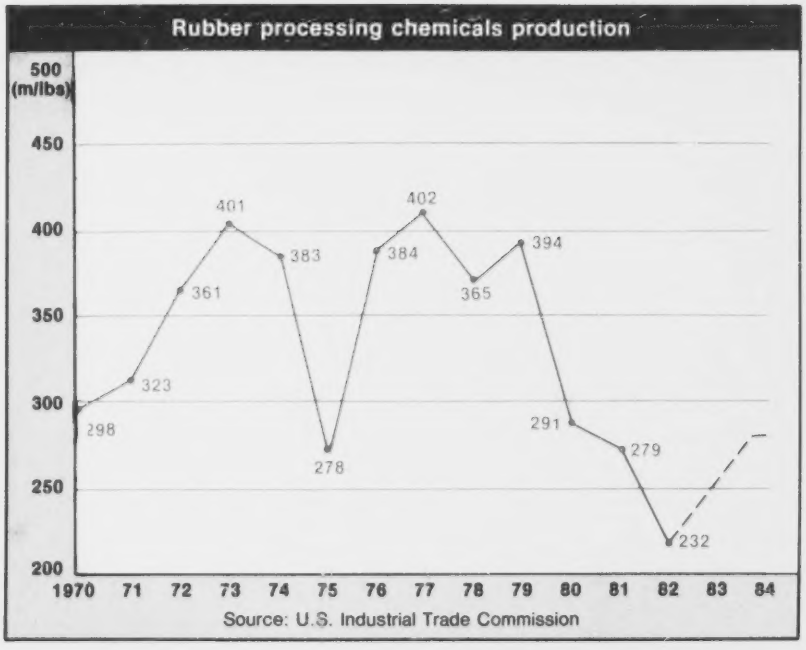
Cyclic rubber processing chemicals account for most of the total produced with acyclic accounting for 17.5% Antioxidants, antiozonanats and stabilizers are the largest group produced accounting for 56% of the total market. Amino compounds account for about 2/3 of this groups' production with phenolics accounting for the other third. Thiazole derivatives are the prime accelerators, activators and vulcanizing agents produced accounting for 93% of the market.

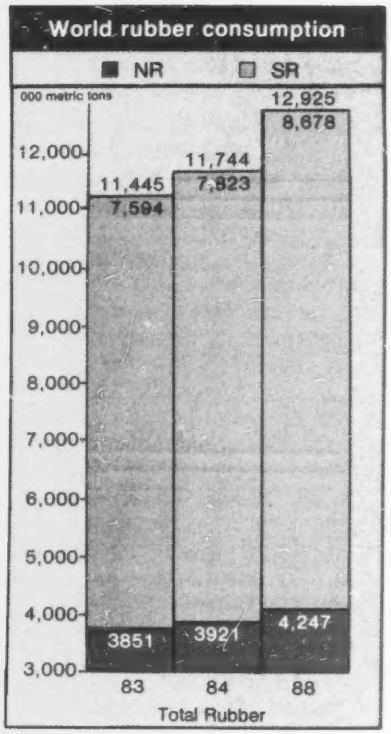
Gauging the market for rubber processing chemicals is difficult because two of the largest suppliers, Goodyear and Uniroyal produce large quantities used captively in their manufacturing operations.

Most chemical producers put an increase in their prices through this past summer at an average of 10-15¢, the first upward movement in prices in almost three years.

Rubber suppliers to the industry weathered the recession that came in with the decade and are experiencing increased sales. With the exception of polychloroprene, all major synthetic rubbers increased production in 1983






**New rubber consumption forecast by region (000 metric tons)**

| | 1982 | 1983 | 1984 | 1988 |
|---|---|---|---|---|
| **Synthetic Rubber** | | | | |
| North America | 1,888 | 1,962 | 2,047 | 2,215 |
| W. Europe, Africa, M. East | 1,487 | 1,506 | 1,532 | 1,634 |
| Asia and Oceania | 999 | 1,087 | 1,104 | 1,242 |
| Latin America | 441 | 439 | 457 | 540 |
| Eastern Europe | 2,400 | 2,430 | 2,500 | 2,800 |
| China/Asian CPEC | 156 | 170 | 184 | 248 |
| TOTAL | 7,371 | 7,594 | 7,823 | 8,678 |
| **Natural Rubber** | | | | |
| North America | 734 | 752 | 778 | 832 |
| W. Europe, Africa, M. East | 964 | 986 | 997 | 1,037 |
| Asia and Oceania | 1,114 | 1,208 | 1,223 | 1,402 |
| Latin America | 168 | 163 | 171 | 198 |
| Eastern Europe | 420 | 420 | 420 | 420 |
| China/Asian CPEC | 306 | 321 | 332 | 378 |
| TOTAL | 3,706 | 3,851 | 3,921 | 4,247 |
| **Total Rubber** | | | | |
| North America | 2,622 | 2,714 | 2,825 | 3,047 |
| W. Europe, Africa, M. East | 2,451 | 2,492 | 2,529 | 2,671 |
| Asia and Oceania | 2,113 | 2,295 | 2,327 | 2,644 |
| Latin America | 609 | 603 | 628 | 738 |
| Eastern Europe | 2,820 | 2,850 | 2,920 | 3,200 |
| China/Asian CPEC | 462 | 491 | 516 | 626 |
| TOTAL | 11,077 | 11,445 | 11,744 | 12,925 |

with further increases during the first half of this year. Consumption of natural rubber, which began its turnaround in 1982 continued through 1983 and onto this year, is also on the increase.

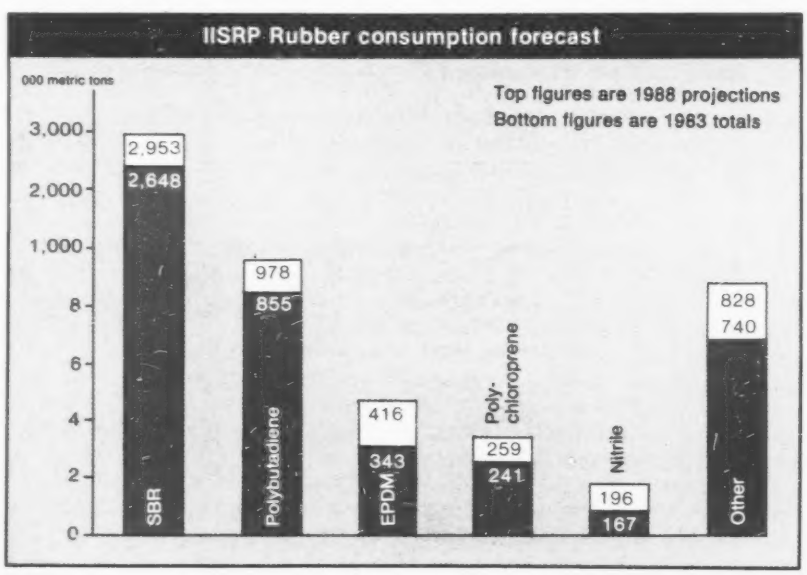
The radialization of the tire industry is a prime reason that natural rubber consumption didn't fall as sharp as that of the synthetics. NR consumption reached a high of 3.87 million metric tons in 1979, declined to around 3.65 mmt in 1982 and rebounded to 3.97 mmt last year. During the first six months of 1984, consumption of NR in the U.S. is up over 13% from the same period of 1983. Worldwide, consumption is up 95,000 metric tons for the first quarter of 1984 compared to 1983.

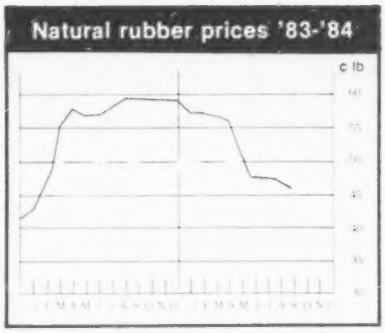
Pricing for the natural rubber producers has been a problem in 1984 with prices declining steadily since February. RSS 1 was selling for 46½¢ a pound in New York in the middle of September. A year earlier the price was 59½¢/lb. In 1980 prices reached 73¢/lb but declined steadily from that point to a low of 44¼¢/lb. in January of 1983. The main natural rubber producing countries, Malaysia, Indonesia and Thailand hope the roller coaster ride of prices is presently at the bottom of the run.

SR consumption rebounded slightly in 1983, a 4% gain over 1982, but 1982 production was lower than any year since 1967. Even production during the oil crisis year of 1975 was higher in the U.S. The International Institute of Synthetic Rubber Producers projects SR demand to rise 3.3% per year for the next five years worldwide but only 2.3% in North America. The IISRP's projection of 2.21 million metric tons of synthetic rubber consumption in 1988 would be the highest figure in the decade but would only be higher than 1975's consumption for that decade.

Stryene butadiene will continue to lead in consumption of synthetics according to the IISRP accounting for 45% of SR consumed. SBR's percentage of the total has been declining because of the smaller, radial tires. The IISRP sees the proportion of total rubber used in tires declining from 61.9% in 1983 to 61.4% but SR will increase its percentage of total rubber used in a tire from 72.3% to 72.7%. Almost two-thirds of SBR production goes into tires.

Ethylene-propylene rubbers are projected for the best growth of the synthetics, with an annual rate slightly higher than 10%. Because of its






emergence in the roofing markets with its single-ply sheets, EPDM producers went through a shorter recession than the others with projections that this roofing will capture an even greater market share. Goodyear says sales of sheet rubber roofing in 1984 will be more than 700 million sq. ft., 17% greater than the predictions made last year, and maybe 30% of the total roofing market which is projected at 2.4 billion sq. ft. The increase in sales is reflected in the figures from the Rubber Manufacturers Association showing EPDM consumption up almost 40% for the first six months of 1984. EPDM consumption rose almost 19% in 1983. If EPDM consumption continues through 1984, almost 184,000 metric tons will be used which would be 21% above projections.

All of the synthetics are performing better than what was projected for the first half of 1984. Total consumption of SR is up almost 17% during the first six months when only modest increases were expected. Besides EPDM, nitrile consumption is up over 29%, polybutadiene increased almost 25%, polychloroprene almost 12% and SBR close to 6%. The other synthetic rubber category consisting of butyl, polyisoprene, silicone and others has increased over 28%.

Although the picture appears to be much better for chemicals and materials suppliers in the U.S., the rise of imports threatens their market share. The U.S. is still considered a net exporter of synthetic rubber and rubber processing chemicals, but the gap is closing. Imports of synthetic rubbers have increased over 53% for the first half of 1984.

The largest jump in imports is with polybutadiene (88%) EPDM (77%) and the category including butyl, polyisoprene and silicone (53%). Other import increases are: SBR up 29%; nitrile up 42%; and polychloroprene up 34%.

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